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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,542	11/25/2003	Takayuki Sugahara	25834	4389
20529 7590 04/05/2007 NATH & ASSOCIATES 112 South West Street Alexandria, VA 22314			EXAMINER WERNER, DAVID N	
			ART UNIT	PAPER NUMBER
			2621	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/05/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/720,542

Applicant(s)

SUGAHARA ET AL.

Examiner

David N. Werner

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 20031125, 20060606
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. A translation or concise explanation of the relevance of "A New Method of Controlling Concealed Level for Scrambling MPEG Video Data", (Katta et al.) cited in the Information Disclosure Statement dated 06 June 2006 is required under 37 CFR 1.98(a)(3). Figure 2(b) of the untranslated document raises a question of relevance to the claimed invention not adequately explained in the abstract. See *Semiconductor Energy Laboratory Co. v. Samsung Electronics Co.*, 204 F.3d 1368, 1376, 54 USPQ2d 1001, 1007 (Fed. Cir. 2000).

Drawings

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to highlight the location of user data in figure 9, as described in page 33, line 31 of the specification, in figure 10, as described in page 34, line 3 of the specification, and in figure 11, as described in page 34, line 9 of the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any

amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to because while the specification states in page 47, lines 21-27 that a deteriorated image is only outputted if data is encoded with a special encoder and decoded with a conventional decoder, figure 22 shows that a deteriorated image is outputted if data is encoded with a special encoder and decoded with a special decoder, as shown by a triangle, representing a deteriorated image, corresponding with the fourth arrow. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If

a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following informality: The sentence of page 36, lines 26-28 does not end with a period. Appropriate correction is required.
6. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 3, and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent Application Publication 2001/0028725 A1 (Nakagawa et al.). Nakagawa et al. teaches an image encoding and decoding system with a scrambling feature.

Regarding claim 1, in the third embodiment of Nakagawa et al. as shown in figure 11 (paragraphs [0148]-[0184]), variable-length encoder 103 generates Huffman code according to known tables in the MPEG-4 standard [0149]. Sign inverter 600 inverts the sign of the Huffman code, thus exchanging Huffman positive coefficients with their negatives, and vice versa [0151]. Selector 601 selects an output for choosing between a regular Huffman code and the inverted Huffman code according to a scramble flag, and multiplexer 602 generates a bitstream that contains an image coded with standard or inverted Huffman coding, the scramble flag, and encoded IP data [0152]. The preambles of claim 3 and claim 4 encompass every limitation of claim 1. Regarding claim 3, figure 12 of Nakagawa et al. shows the decoder for the image encoder shown in figure 11. Security Controller 504 recognizes the scramble flag, and instructs selector 701 to decode a signal through sign inverter 600 or not. If the scramble flag is set to ON, input 'b' is chosen in selector 701, so variable-length decoder 201 decodes a signal that the inverted signal is inverted back to the regular Huffman code by sign inverter 600. If the scramble flag is set to OFF, input 'a' is chosen in selector 701, so an inverted signal is not decoded [160]. Dequantizer 202 and inverse DCT device 203 further decode the signal. Regarding claim 4, if the scramble flag is set to "ON" and an IP authentication result is "NG", such as if an unauthorized user is attempting to access

content, selector 701 is set to 'a', so the inverted signal is decoded, bypassing sign inverter 600, resulting in a scrambled image [0163].

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa et al. Although claims 2, 5, and 6 are in means-plus-function format, phrases like "variable length coding table obtaining means" and "coding selection signal detecting means" limit the claims to hardware embodiments, and so the software embodiment described in pages 47-50 of the specification is outside the scope of the claims. Therefore, claims 2, 5, and 6 are modified by sufficient structure for achieving the specified functions, and so fail the third prong of the test specified in MPEP 2181. Although the specification of the present invention presents fifteen embodiments, the first embodiment, as shown in figures 6 and 7 appears generic. Regarding claim 2, as previously mentioned, Nakagawa et al. teaches an MPEG-4 encoder. The present invention differs from Nakagawa et al. in that in the present invention, one VLC table is chosen according to a selection signal, and the data is encoded only with the selected VLC table, and in Nakagawa et al., the data is encoded in two VLC tables, one with the standard Huffman code and one with the inverted Huffman code, and the encoded data

stream to output is chosen according to a selection signal. In other words, Nakagawa et al. discloses the claimed invention except for reversing the exchanged variable length coding table generating means and the variable length coding means. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to reverse the VLC table selector and the VLC coder, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. See *In re Einstein*, 8 USPQ 167.

The preambles of claim 5 and 6 encompass every limitation of claim 2.

Regarding claim 5, the coding selection signal detecting means, the variable length decoding means, and the contents signal decoding means respectively correspond with security controller 504, variable-length decoder 201, dequantizer 202, and inverse DCT device 203 of the MPEG-4 decoder of the third embodiment of Nakagawa et al.

Regarding claim 6, the variable length coding table selecting means corresponds with selector 701 of Nakagawa et al.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- US Patent 6,035,044 A (Itoi)
- US Patent 6,373,960 B1 (Conover et al.)
- US Patent Application Publication 2001/0009581 A1 (Hashimoto)
- US Patent Application Publication 2002/0097802 A1 (Lin et al.)

- US Patent Application Publication 2002/0129253 A1 (Langelaar)
- US Patent Application Publication 2004/002389 A1 (Shen-Orr et al.)
- UK Patent Application Publication GB 2328579 A (Chung et al.)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David N. Werner whose telephone number is (571) 272-9662. The examiner can normally be reached on Monday-Friday from 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DNW

Mehrdad Dastouri
MEHRDAD DASTOURI
SUPERVISORY PATENT EXAMINER
TC 2600